

HASP Meeting #6 Minutes: Jan. 28, 5:00 PM - 6:00 PM

- Modification to original plan: lack of a guaranteed portion of the flight in darkness requires an instrumentation change to proceed with a daytime-only mission. Geiger counters available from Dr. David Knudsen in a physical form suitable for inclusion on the payload. Replacing the rolling-shutter camera with a geiger counter allows lightning VLF signature and particle emission studies that can be done during the day. GoPro camera to be left as is for visual confirmation of lightning strikes.
- Modification to the original goal: comparison between sprites and VLF to be replaced with comparison between lightning strikes, VLF impulse, and geiger counter hits.
- New potential hazard identified: geiger counter requires high voltage power supply. Risk mitigation strategy is to use expert advice from Dr. David Knudsen and pot the device in epoxy. This procedure has been applied at the U of C before for sounding rocket flights with no problems. This requires documentation in response to reviewer comments.
- Benefit to using geiger counter identified: potential application to CaNoRock student sounding rocket missions in Norway. Faculty here have wanted to fly a geiger counter on those rockets for some time and this presents an opportunity to develop for that platform in parallel.
- Technical documents for CaNoRock interface are in Norwegian. Translation available from fluent personnel on campus.
- M. Patrick to ask LSU / HASP which format they prefer responses to reviewer comments in.
- There is a conference call on Feb 6th. Exact time is in documentation. Team leader to be there, all others welcome. Time / place to be sent to all group members as soon as arranged.
  
- Preliminary list of items that require writing:
  - Technical description of the geiger counter module
  - Recompute power and mass budgets
  - Risk management to include the high voltage aspect and mitigation strategy
  - CaNoRock motivations need to be written and placed in appropriate sections(s)
  - Mechanical drawings for the interface between the HASP plate and the 2-U cubesat.

- Google docs list of available tasks distributed to group members. First meeting with writing to happen next week.
- M. Patrick to ask D. Knudsen if he can attend next meeting to brief us on the geiger counter.
- Dr. Laura Mazzino is moving to Calgary this week. We will keep her advised of our progress through email.
- Target is to start physical construction of the payload by the end of February.
- We need a new project acronym.
- Next meeting - need to start sub-dividing groups into those who will start the physical construction of the payload.

### Current Group Status

The group has reconvened after the winter break. The organizational structure is the same as that which was submitted in the proposal, and the group has indicated that they are happy with the current arrangement. Our main concern at this point is addressing the reviewer comments on our application and beginning physical construction of the payload as quickly as possible. Some modifications to the payload design need to be documented and sent to HASP for approval. This will be done in either the form of replies to comments, or a modification to the original application, depending on the preference of the reviewers.

Group contact information has not changed since the application was submitted.